

TABLE OF CONTENTS

LIST OF ACRONYMS	vii
LIST OF WORKS CITED.....	viii
LIST OF TECHNICAL REPORTS.....	ix
CHAPTER 1 – PURPOSE AND NEED.....	1-1
1.1 Project Background.....	1-1
1.2 Corridor Planning.....	1-3
1.3 Project Need.....	1-12
1.4 Project Purpose	1-16
1.5 Project Goals and Objectives	1-17
1.6 Related Environmental Impact Statements, Environmental Assessments, and Other Relevant Documents and Planning Studies	1-18
CHAPTER 2 – ALTERNATIVES	2-1
2.1 Development of “Reasonable” And “Other” Alternatives.....	2-1
2.2 Alternatives Considered But Eliminated From Detailed Study	2-2
2.3 Alternatives Selected For Detailed Study	2-18
2.4 Identification of the Preferred Alternative	2-28
CHAPTER 3 – AFFECTED ENVIRONMENT.....	3-1
3.1 Land Use	3-1
3.2 Farmlands.....	3-7
3.3 Social Conditions	3-7
3.4 Environmental Justice	3-21
3.5 Relocations.....	3-26
3.6 Economic Conditions.....	3-26
3.7 Pedestrians and Bicyclists.....	3-27
3.8 Air Quality	3-28
3.9 Noise	3-29
3.10 Water Quality	3-30
3.11 Wetlands	3-32
3.12 Floodplains.....	3-32
3.13 Wildlife	3-32
3.14 Threatened or Endangered Species	3-32
3.15 Cultural Resources	3-33
3.16 Hazardous Waste Sites.....	3-39
3.17 Visual Conditions.....	3-40
3.18 Invasive Species.....	3-41

CHAPTER 4 – ENVIRONMENTAL CONSEQUENCES	4-1
4.1 Land Use	4-1
4.2 Farmlands.....	4-3
4.3 Social Conditions	4-4
4.4 Environmental Justice.....	4-7
4.5 Relocations.....	4-8
4.6 Economic Conditions.....	4-14
4.7 Pedestrians and Bicyclists.....	4-15
4.8 Air Quality	4-16
4.9 Noise	4-19
4.10 Water Quality	4-41
4.11 Permits	4-42
4.12 Wetlands	4-42
4.13 Floodplains.....	4-43
4.14 Wildlife	4-43
4.15 Threatened and Endangered Species	4-43
4.16 Cultural Resources	4-43
4.17 Hazardous Waste Sites.....	4-51
4.18 Visual Conditions.....	4-52
4.19 Energy	4-53
4.20 Invasive Species.....	4-54
4.21 Construction and Phasing Impacts.....	4-54
4.22 The Relationship Between Local Short-Term Uses of Man’s Environment and the Maintenance and Enhancement of Long-Term Productivity	4-56
4.23 Any Irreversible and Irretrievable Commitments of Resources which would be Involved in the Proposed Action	4-57
4.24 Cumulative impacts	4-58
4.25 Context Sensitive Solutions	4-61
4.26 Comparison Summary of the Predicted Environmental Effects of Alternatives	4-62
4.27 Summary of Mitigation and Other Commitments	4-69
CHAPTER 5 – SECTION 4(F) EVALUATION.....	5-1
5.1 Proposed Action.....	5-2
5.2 Identification of Section 4(f) Properties	5-24
5.3 Analysis Of Impacts to Section 4(f) Properties and Determination of “Use”	5-42
5.4 Avoidance Alternatives.....	5-67
5.5 Measures to Minimize Harm	5-78
5.6 Summary of Section 4(f) Impacts	5-80
5.7 Coordination	5-81
5.8 Concluding Statement.....	5-82
CHAPTER 6 – LIST OF PREPARERS	6-1

CHAPTER 7 – LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THE STATEMENT ARE SENT.....7-1**CHAPTER 8 – COMMENTS AND COORDINATION.....8-1**
8.1 Coordination Meetings.....8-1
8.2 Correspondence Letters8-8**APPENDIX A: REGIONAL TRAVEL DEMAND MODELING****APPENDIX B: UDOT NOISE ABATEMENT POLICY****APPENDIX C: DETERMINATION OF ELIGIBILITY AND FINDING OF EFFECT AND
MEMORANDUM OF AGREEMENT****APPENDIX D: COMMENTS ON DRAFT EIS****List of Tables**

Table 1-1. North Davis County: Cities Growth Summary.	1-13
Table 1-2. Syracuse Road Year 2000 and 2004 Vehicles Per Day.....	1-14
Table 1-3. 2030 Level of Service on Existing Syracuse Road.	1-15
Table 1-4. Operational Safety Report Accident Data.	1-16
Table 1-5. Accident Summary for 2000-2002 on Syracuse Road between 1000 West and 2000 West.	1-16
Table 1-6. Minimum and Desirable Values for Roadway Design Elements.	1-18
Table 2-1. Initial Range of Alternatives.	2-1
Table 2-2. Comparison Between Traffic Capacity for LOS D and Year 2030 Traffic Volumes.	2-2
Table 2-3. Summary of Initial Five-Lane Build Alternatives.	2-6
Table 2-4. Comparison of Individual Cross-Section Elements of 90-ft and 110-ft Cross-Sections and Desirable and Minimum Design Standards.....	2-10
Table 2-5. Purpose and Need Preliminary Screening.	2-11
Table 2-6. LOS D Traffic Capacity Compared with 2030 Travel Demand for 90-ft and 110-ft Cross-Sections.....	2-11
Table 2-7. Partial Summary of Impacts for Preliminary Five-Lane Alternatives.....	2-14
Table 3-1. Selected Population Characteristics in 2000 for Two Census Tract Segments Encompassing the Project Study Area.	3-10
Table 3-2. Social and Demographic Characteristics (Survey Results).	3-12
Table 3-3. Population Characteristics (from 2000 Census Data) Relating to Environmental Justice for Two Census Tract Segments Encompassing the Project Study Area.	3-22
Table 3-4. Syracuse Road Corridor Income and Household Size Statistics.	3-25
Table 3-5. Air Quality Attainment Status for Motor Vehicle Related Pollutants in Davis County.	3-28
Table 3-6. Existing Noise Levels.....	3-30
Table 3-7. NRHP Criteria for Evaluation.	3-34
Table 3-8. Utah SHPO Rating Definitions for Historic Properties.....	3-34
Table 3-9. Historic Structures within the APE	3-34
Table 3-10. Leaking Underground Storage Tanks.....	3-39

Table 4-1. Alternative C Potential Relocations	4-8
Table 4-2. Alternative D Potential Relocations	4-9
Table 4-3. Available Homes for Sale in Syracuse City, Zip Code 84075 (January 25, 2005). ...	4-13
Table 4-4. Available Land for Sale in Syracuse City, Zip Code 84075 (January 25, 2005). ...	4-13
Table 4-5. Year 2030 CAL3QHC Hot Spot Modeling Results for the No-action Alternative.	4-17
Table 4-6. Year 2030 CAL3QHC Hot Spot Modeling Results for Alternatives C and D.....	4-18
Table 4-7. Noise Abatement Criteria.....	4-20
Table 4-8. Noise Impacts of the No-action Alternative	4-20
Table 4-9. Noise Impacts of Alternative C (before mitigation).....	4-21
Table 4-10. Noise Impacts of Alternative D (before mitigation).....	4-21
Table 4-11. Summary of Existing and Predicted Noise Levels.....	4-21
Table 4-12. Sensitive Receivers Impacted by Noise and Available Mitigation for Alternative C	4-29
Table 4-13. Results of Noise Wall 5 Analysis.....	4-31
Table 4-14. Sensitive Receivers Impacted by Noise and Available Mitigation for Alternative D...	4-32
Table 4-15. Results of Noise Wall 2 Analysis.....	4-33
Table 4-16. Results of Noise Wall 3 Analysis.....	4-36
Table 4-17. Results of Noise Wall 4 Analysis.....	4-37
Table 4-18. Results of Noise Wall 5 Analysis	4-38
Table 4-19. Summary of Noise Mitigation (Alternative C).....	4-39
Table 4-20. Summary of Noise Mitigation (Alternative D)	4-40
Table 4-21. Effects to Historic Properties due to Alternative C	4-46
Table 4-22. Effects to Historic Properties along Syracuse Road due to Alternative D	4-48
Table 4-23. Environmental Effects Comparison Summary.....	4-62
 Table 5-1. Summary of Alternatives.....	5-4
Table 5-2. Comparison of Individual Cross-Section Elements of 90-ft and 110-ft Cross-Sections and Desirable and Minimum Design Standards.....	5-12
Table 5-3. Purpose and Need Preliminary Screening.....	5-12
Table 5-4. LOS D Traffic Capacity Compared with 2030 Travel Demand for 90-ft and 110-ft Cross-Sections.....	5-13
Table 5-5. Partial Summary of Impacts for Preliminary Five-Lane Alternatives.....	5-15
Table 5-6. NRHP Criteria for Evaluation	5-26
Table 5-7. Utah SHPO Rating Definitions for Historic Structures.....	5-26
Table 5-8. Results of the RLS.....	5-27
Table 5-9. Historic Property Impacts for Alternative C and Alternative D	5-45
Table 5-10. Summary of Section 4(f) Impacts from Preferred Alternative (Alternative C)....	5-80
 Table 8-1. Coordination Letters	8-8

List of Figures

Figure 1-1. Project Location Map.....	1-2
Figure 1-2. WFRC Highway Phasing Plan.....	1-4
Figure 1-3. WFRC Functional Classification.....	1-5
Figure 1-4. WFRC Bicycle Routes.....	1-7
Figure 1-5. WFRC Transit Plan.....	1-8
Figure 1-6. Syracuse Town Center Master Plan.....	1-10
Figure 1-7. Syracuse City Master Transportation Plan - Roadway Classification and 2015 Recommended Build	1-11
Figure 1-8. Level of Service A Through F.....	1-14
Figure 1-9. Syracuse Area 2004 and Projected 2030 Vehicles Per Day.....	1-15
Figure 2-1. Number of Alternatives vs. Level of.....	2-2
Figure 2-2. Five-Lane Build Alternatives.....	2-5
Figure 2-3. Five-Lane Build Alternatives A, B, C.....	2-7
Figure 2-4. Five-Lane Build Alternatives D, E, F	2-8
Figure 2-5. 90-ft Cross-Section Build Alternatives G, H, I	2-9
Figure 2-6. Alternative C Typical Section.....	2-20
Figure 2-7. Alternative D Typical Section.....	2-21
Figure 2-8. Alternative C 2000 West Intersection	2-22
Figure 2-9. Alternative C 1000 West Intersection	2-22
Figure 2-10. Alternative D 2000 West Intersection.....	2-23
Figure 2-11. Alternative D 1000 West Intersection.....	2-23
Figure 2-12. Alternative C Widen to the South (No. 2).....	2-24
Figure 2-13. Alternative C Widen to the South (No. 2).....	2-25
Figure 2-14. Alternative D Widen to the North	2-26
Figure 2-15. Alternative D Widen to the North	2-27
Figure 3-1. Syracuse City Current Zoning Map (Approved January 4, 2005).	3-2
Figure 3-2. Syracuse City General Plan (Approved February 25, 2003).....	3-3
Figure 3-3. Syracuse City Town Center Master Plan (Adopted March 11, 2003)	3-5
Figure 3-4. Syracuse City Parks Map.....	3-6
Figure 3-5. Census Tract Boundaries.....	3-9
Figure 3-6. Schools with Boundaries in Project Area.....	3-27
Figure 3-7. Noise levels (in dBA) of common sounds	3-29
Figure 3-8. Existing Noise Impact (2004)	3-31
Figure 3-9. Underground Storage Tanks.....	3-40
Figure 3-10. Existing Visual Conditions on Syracuse Road.....	3-41

Figure 4-1. Alternative C Potential Relocations.....	4-11
Figure 4-2. Alternative D Potential Relocations.....	4-12
Figure 4-3. No-action Noise Impacts (2030)	4-25
Figure 4-4. Alternative C Noise Impacts (2030)	4-26
Figure 4-5. Alternative D Noise Impacts.....	4-27
Figure 4-6. Alternative C Noise Wall Mitigation.....	4-34
Figure 4-7. Alternative D Noise Wall Mitigation.....	4-35
Figure 5-1. Project Location Map.....	5-2
Figure 5-2. Five-Lane Build Alternatives.....	5-7
Figure 5-3. Five-Lane Build Alternatives A, B, C.....	5-9
Figure 5-4. Five-Lane Build Alternatives D, E, F	5-10
Figure 5-5. Five-Lane Build Alternatives G, H, I.....	5-11
Figure 5-6. Alternative C Widen to the South (No. 2).....	5-20
Figure 5-7. Alternative C Widen to the South (No. 2).....	5-21
Figure 5-8. Alternative D Widen to the North.....	5-22
Figure 5-9. Alternative D Widen to the North.....	5-23
Figure 5-10. Syracuse City Parks Map.....	5-24
Figure 5-11. Historic Properties.....	5-30
Figure 5-12. Alternative C Historic Property Impacts.....	5-61
Figure 5-13. Alternative C Historic Property Impacts.....	5-62
Figure 5-14. Alternative C Historic Property Impacts.....	5-63
Figure 5-15. Alternative D Historic Property Impacts.....	5-64
Figure 5-16. Alternative D Historic Property Impacts.....	5-65
Figure 5-17. Alternative D Historic Property Impacts.....	5-66

LIST OF ACRONYMS

AADT	Average Annual Daily Traffic	LWCFA	Land and Water Conservation Fund Act
AASHTO	American Association of State Highway and Transportation Officials	MAG	Mountainland Association of Governments
ac	acre	mi	mile
ACHP	Advisory Council on Historic Preservation	MOA	Memorandum of Agreement
ADA	Americans with Disabilities Act	MOU	Memorandum of Understanding
AHPA	Archeological and Historic Preservation Act	NAAQS	National Ambient Air Quality Standards
APE	Area of Potential Effects	NEPA	National Environmental Policy Act
ARPA	Archeological Resources Protection Act	NHPA	National Historic Preservation Act
BMP	Best Management Practice	NOI	Notice of Intent
BRT	Bus Rapid Transit	NOT	Notice of Termination
CAA	Clean Air Act Amendments	NRCS	Natural Resources Conservation Service
CSS	Context Sensitive Solutions	NRHP	National Register of Historic Places
CERCLIS	Comprehensive Emergency Response, Compensation, and Liability Information System	PAC	Public Advisory Committee
CFR	Code of Federal Regulations	PM ₁₀	Particulate Matter with a diameter of less than 10 micrometers
cfs	cubic foot per second	PPM	Parts Per Million
CMS	Congestion Management System	RLS	Reconnaissance Level Survey
CO	Carbon Monoxide	ROD	Record of Decision
dBA	A-weighted decibels	SHPO	State Historic Preservation Office
DEIS	Draft Environmental Impact Statement	SIP	State Implementation Plan
DERR	Division of Environmental Response and Remediation	STIP	Statewide Transportation Improvement Program
DOE	Determination of Eligibility	SWPPP	Storm Water Pollution Prevention Plan
DOT	Department of Transportation	TDM	Transportation Demand Management
EIS	Environmental Impact Statement	TIP	Transportation Improvement Plan
EPA	Environmental Protection Agency	TNM	Traffic Noise Model
FEIS	Final Environmental Impact Statement	TSM	Transportation System Management
FEMA	Federal Emergency Management Agency	UDAQ	Utah Division of Air Quality
FHWA	Federal Highway Administration	UDEQ	Utah Department of Environmental Quality
FIRM	Flood Insurance Rate Map	UDOT	Utah Department of Transportation
FOE	Finding of Effect	UDWQ	Utah Division of Water Quality
FONSI	Finding of No Significant Impact	UDWR	Utah Division of Wildlife Resources
ft	foot	UGS	Utah Geological Survey
ft ²	square foot	UPDES	Utah Pollutant Discharge Elimination System
FTA	Federal Transit Administration	UPRR	Union Pacific Railroad
HHS	U.S. Department of Health and Human Services	USC	United States Code
HOV	High Occupancy Vehicle	USACOE	United States Army Corps of Engineers
ILS	Intensive Level Survey	USDOI	United States Department of the Interior
ITS	Intelligent Transportation System	USFWS	United States Fish and Wildlife Service
L(eq)	Equivalent (or average) Noise Level	UST	Underground Storage Tank
LOS	Level of Service	UTA	Utah Transit Authority
LRP	Long Range Plan	WFRC	Wasatch Front Regional Council
LRT	Light Rail Transit		
LRTP	Long Range Transportation Plan		
LUST	Leaking Underground Storage Tank		

LIST OF WORKS CITED

Kasarda, J.D. and M. Janowitz. 1974. "Community attachment in mass society." *American Sociological Review* 39 (3): 328-339.

LIST OF TECHNICAL REPORTS

Technical Report Title	Prepared by	Contact
<i>A Cultural Resource Inventory of a Segment of Syracuse Road (SR-108) from 1000 West to 2000 West in Syracuse, Davis County, Utah Project No. STP-0108(8)4</i>	EarthTouch, LLC	Stan Jorgensen Horrocks Engineers P.O. Box 377 American Fork, Utah 84003
<i>Community Social Assessment for the Proposed Syracuse Road Highway Reconstruction Project</i>	Richard S. Krannich, PhD Rocky Mountain Social Science P.O. Box 184 Paradise, Utah 84328	Stan Jorgensen Horrocks Engineers P.O. Box 377 American Fork, Utah 84003
<i>Selective Reconnaissance Survey Syracuse, Davis County, Utah</i>	Nancy Calkins Historic Preservation Consultant	Stan Jorgensen Horrocks Engineers P.O. Box 377 American Fork, Utah 84003
<i>Syracuse Road Traffic Analysis</i>	Horrocks Engineers	Connie Douglas Horrocks Engineers P.O. Box 377 American Fork, Utah 84003
<i>Wetland Identification</i>	Wetland Resources 182 East 300 North Logan, Utah 84321	Stan Jorgensen Horrocks Engineers P.O. Box 377 American Fork, Utah 84003
<i>Syracuse Road ; 1000 West to 2000 West Technical Noise Report</i>	Horrocks Engineers	Nicole Tolley Horrocks Engineers P.O. Box 377 American Fork, Utah 84003